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(Priority: Germany)
NSA TT-64-30828

Karl Ziegler

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Tr 33E10G
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Trans. of [Justus Liebig's] Annalen der Chemie
(Germany) 1930, v. 479, p. 135-149.

DESCRIPTORS: *Metalorganic compounds, *Alkali
metal compounds, *Lithium compounds, Alkyl radicals,
Synthesis (Chemistry), Ziegler catalysts.

(See also K-H 3456-c)

(Chemistry--Organic, EE, v. 10, no. 10)

63-22492

I. Ziegler, K.
H. Colonius, H.
III. K-H-3456-d
IV. Title: Research...
V. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

125236

Office of Technical Services

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DESCRIPTORS: *Organic compounds, *Hydrocarbons,
Polymerization, *Catalysis, *Alkali metal compounds

(Chemistry--Organic, TT, v. 10, no. 12)

63-22831

- I. Ziegler, K.
- II. Jakob, L.
- III. K-H-3456-e
- IV. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

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DESCRIPTORS: *Alkyl radicals, *Alkali metal com-
pounds, *Hydrocarbons, Chemical reactions

(Chemistry--Organic, TT, v. 10, no. 12)

63-22839

- I. Ziegler, K.
- II. Crossmann, F.
- III. Kleinger, H.
- IV. Schafer, O.
- V. Title: Research...
- VI. K-H-3559-a
- VII. Kresge-Hooker Science
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Detroit, Mich.

6

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JPRS 15857

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DESCRIPTORS: *Alkyl radicals, *Alkali metal com-
pounds, *Hydrocarbons, Polymerization

(Chemistry--Organic, TT, v. 10, no. 12)

63-22840

- I. Ziegler, K.
- II. Dersch, F.
- III. Wollhan, H.
- IV. Title: Research.
- V. K-H-3456-f
- VI. Kresge-Hooker Science
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Detroit, Mich.

63-22840

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2. Petroleum industry
3. Chemical engineering
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Karl Ziegler

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Method for the Purification of Polyolefins, by
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26 Aug 1954.

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Societa Generale per l'Industria Mineraria e
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450, 10 Jan 1957).

RIS rept. 98969

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Reacting Organoaluminum Halides With Olefins, by
Karl Ziegler.

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RIS rept. 97057

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Scientific - Chemistry Jul 55 CTS

Process for the Preparation of Sodium Cyclopentadiene
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GERMAN, Patent Appl No Z 2857, 12 o, 25,
28 Oct 1954, M^ulheim/Ruhr.

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DAS 1,034,169, filed 7 Jan 1954, Pub 17 Jul 1958.

RIS rept 96948

Sci - Chem
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Nagel, Konrad, and Schneider, Josef.

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Compounds. [1963] 56p (figs omitted)

Order from K-H \$56.00

K-H-3215

Trans. of [Justus] Liebigs Annalen der Chemie (West
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DESCRIPTORS: Metalorganic compounds, *Aluminum
compounds, *Hydrogen, *Ethylene, Chemical reactions

63-22845

I. Ziegler, K.

II. Gellert, H.-G.

III. Martin, H.

IV. Nagel, K.

V. Schneider, J.

VI. Title: Metalloorganic...

VII. K-H-3215

VIII. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

6.33

(Chemistry--Organic, TT, v. 10, no. 12)

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Ziegler, Karl, Martin, Heinz, and Krupp, Felix.
ALUMINUM TRIALKYLS AND DIALKYL ALUMINUM
HYDRIDES FROM ISOBUTYL ALUMINUM COM-
POUNDS. Pt. 27 of Metalloorganic Compounds. [1961]
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Order from K-H \$8.00

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Trans. of [Justus] Liebigs Annalen [der] Chemie (West
Germany) 1960, v. 629 [no. 1/3] p. 14-19.

Another trans. is available from SLA \$1.10 as
61-20450 [1961] 8p

DESCRIPTORS: Metalorganic compounds, *Aluminum
compounds, *Hydrides, *Alkyl radicals, *Butyl radi-
cals, Synthesis (Chemistry), Chemical reactions.

(Chemistry--Organic, TT, v. 10, no. 12)

63-22847

I. Title: Alkylaluminum
hydride

1. Ziegler, K.

II. Martin, H.

III. Krupp, F.

IV. Title: Metalloorganic...

V. K-H-10024-12

VI. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

A256332

Office of Technical Services

Trialkyl- and Dialkylaluminum Hydrides
from Chlorine, Hydrogen and Aluminum,
by Karl Ziegler, Hans-Georg Gollert,
Herbert Lehnkuhl, Werner Frohl Kurt
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CHEMIE, per, Justus Liebigs Annalen
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SLA TT-64-30986

Karl Ziegler

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Process for the Preparation of Higher
Branched Alkyls from Lower Branched Alkyls,
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Rainer Kroll, Jr.
CHEMAB, patent, 1,053,534, 1958.
SLA TT-65-10379

Karl Ziegler
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Aug 67

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POLYMERIZATION OF UNSATURATED HYDRO-
CARBONS UNDER THE INFLUENCE OF ALKALI
METALS AND ALKALI METAL ALKYL. Pt. 3 of
[Research on Alkali Organic Compounds]. [1963] 37p
(figs omitted)

Order from K-H \$37.00

K-H 3559 b

Trans. of [Justus Liebig's] Annalen der Chemie
(Germany) 1929, v. 473, p. 57-82.

DESCRIPTORS: *Alkyl radicals, *Alkali metals, *Hy-
drocarbons, Polymerization

(Chemistry--Organic, IT, v. 11, no. 1)

TT-61-22832

- I. Ziegler, K.
- II. Kleiner, M.
- III. K-H 3559-b
- IV. Kresge-Hooker Science
Library Associates,
Kettolt, Mich.

Office of Technical Services

Ziegler, Karl; Grimm, H., and Willer, R.
[1963] 48p (has cover)
Order from K-H \$42.00

Trans. of [Justus Liebig's] Annalen der Chemie
(Germany) 1940, v. 542, p. 90-122

DESCRIPTORS: *Butadienes, Polymerization, Organic
compounds

TT-67-22851

I. Ziegler, K.
II. Grimm, H.
III. Willer, R.
IV. K-H-3456-m
V. Title: Research ...
VI. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

(Chemistry--Organic, TT, v. 11, no. 1)

Office of Technical Services

Ziegler, Karl and Gellert, H. G.
ADDITION OF LITHIUM ALKYL TO ETHYLENE.
[1963] 18p (figs omitted) 18 refs
Order from SLA \$1.60

63-18956

Trans. of [Justus Liebig's] Annalen der Chemie
(West Germany) 1950, v. 567, p. 195-203.

DESCRIPTORS: *Ethylenes, *Alkyl radicals, *Lithium
compounds, Additives, Pyrolysis, Chemical reactions.

(Chemistry--Organic, TT, v. 10, no. 12)

63-18956

I. Ziegler, K.
II. Gellert, H. G.

~~SECRET~~

63-18956

Office of Technical Services

Ziegler, K[arl] and Gellert, H. G.
REACTIONS BETWEEN LITHIUM ALKYL AND
ETHERS. (1963) 11p (figs omitted) 5 refs
Order from SLA \$1.60 63-18952

Partial trans. (p. 185-190) of [Justus] Liebigs
Ann[alen der Chemie] (West Germany) 1950, v. 567,
p. 185-195.

DESCRIPTORS: *Ethers, *Alkyl radicals, *Lithium
compounds, Decomposition, Chemical reactions.

(Chemistry--Organic, TT, v. 10, no. 12)

63-18952

I. Ziegler, K.
II. Gellert, H. G.

~~CONFIDENTIAL~~

6

Office of Technical Services

Ziegler, K.
THE IMPORTANCE OF ALKALI METALLO-ORGANIC
COMPOUNDS FOR SYNTHESIS. [1964] 17p 4refs
Order from SLA \$1.60
TT-64-14901

Trans. of Angew[andte] Chem[ie] (Germany) 1936, v. 49,
no. 30, p. 499-502.
Another trans. is available from K-H \$17.00 as
K-H-3456-k [1963] 17p.

(Chemistry--Organic, TT, v. 11, no. 11)

TT-64-14901

I. Ziegler, K.

29909

Office of Technical Services

Ziegler, K., Grimm, H., and Willer, R.
[ALKALI ORGANIC COMPOUNDS]. XV. CONTROLLER
1,4-POLYMERIZATION OF BUTADIENE. [1964] 48p
(figs omitted) 10 refs
Order from SLA \$4.60

TT-64-14906

Trans. of [Justus Liebig's] Annalen der Chemie
(Germany) 1939, v. 542, p. 90-122.

See also TT-64-14896.

(Chemistry--Organic, TT, v. 11, no. 11)

TT-64-14906

I. Ziegler, K.
II. Grimm, H.
III. Willer, R.
IV. Title: Controller...

080571

Office of Technical Services

Ziegler, K., Croesmann, F., Kleiner, H.,
and Schäfer, O.
ALKALI ORGANIC COMPOUNDS. I. REACTIONS BE-
TWEEN UNSATURATED HYDROCARBONS AND
ALKALI METAL ALKYLs. [1964] 48p (figs omitted)
35refs
Order from SLA \$4.60

TT-64-14926

Trans. of [Justus Liebig's] Annalen der Chemie
(Germany) 1929, v. 473, p. 1-35.

(Chemistry--Organic, TT, v. 11, no. 11)

TT-64-14926

I. Ziegler, K.
II. Croesmann, F.
III. Kleiner, H.
IV. Schäfer, O.
V. Title: Reactions...

250560

Office of Technical Services

Ziegler, K. and Kleiner, H.
POLYMERIZATION OF UNSATURATED HYDRO-
CARBONS UNDER THE INFLUENCE OF ALKALI
METALS AND ALKALI METAL ALKYLs, III [1964]
37p (figs omitted) 7refs
Order from SLA \$3.60

TT-64-14928

Trans. of [Justus Liebig's] Annalen [der Chemie]
(West Germany) 1929, v. 473, p. 57-82.

(Chemistry--Organic, TT, v. 11, no. 11)

TT-64-14928

I. Ziegler, K.
II. Kleiner, H.

1050570

Office of Technical Services

Ziegler, Karl and Hoberg, H.
REACTION INHIBITION OF ALUMINUM TRIALKYLS
BY ASSOCIATION. [1963] 22p
Order from K-H \$22.00

K-H 11313

Trans. of Chemische Berichte (West Germany) 1960,
v. 93 [no. 12] p. 2938-2950.

DESCRIPTORS: *Ziegler catalysts, *Metalorganic
compounds, *Alumina compounds, Alkyl radicals,
Chemical reactions.

(Chemistry--Physical, TT, v. 10, no. 10)

63-22506

- I. Ziegler, K.
- II. Hoberg, H.
- III. K-H-11313
- IV. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

125250

Office of Technical Services

Ziegler, Karl, Lehmkuhl, Herbert, and
Linder, Eberhard.

ELECTROLYSIS OF SEVERAL COMPLEX ORGANO-
ALUMINUM COMPOUNDS ON INDIFFERENT
ANODES. [1963] 21p

Order from K-H 521 (K)

K-H 9575

Trans. of Chemische Berichte (West Germany) 1959,
v. 92, p. 2320-2332.

DESCRIPTORS: *Ziegler catalysts, *Metalorganic
compounds, Complex compounds, *Aluminum com-
pounds, Alkyl radicals, Electrolysis, *Electro-
chemistry, Anodes (Electrolytic cell).

(Chemistry--Physical, TT, v. 10, no. 10)

63-22507

- I. Ziegler, K.
- II. Lehmkuhl, H.
- III. Linder, E.
- IV. K-H-9575
- V. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

1250001

Office of Technical Services

Ziegler, Karl and Wenz, Adolf.
STEREOCHEMICAL STUDIES. III. THE PROBLEM OF
OPTICALLY ACTIVE ALKYL ORGANIC COMPOUNDS.
[1963] Sp

Order from K-11 \$8.00

K-11-3456-1

Trans. of Chemische Berichte (West Germany) 1950,
v. 83, p. 354-358.

DESCRIPTORS: *Stereochemistry, *Alkali metal
compounds, *Metalorganic compounds, Ziegler
catalysts.

(Chemistry - Organic. IT, v. 10, no. 10)

63-22505

I. Ziegler, K.

II. Wenz, A.

III. Title: Problem.

IV. K-11-3456-1

V. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

1252360

Office of Technical Services

Ziegler, K[arl].
THE IMPORTANCE OF ALKALI METALLO-
ORGANIC COMPOUNDS FOR SYNTHESIS. [1963] 20p
Order from K-H \$20.00 K-H 3456-1

Trans. of Angewandte Chemie (Germany) [1936] v. 49,
p. 455-460.

DESCRIPTORS: *Metalorganic compounds, Synthesis
(Chemistry), *Alkali metal compounds.

(Chemistry--Organic, TT, v. 10, no. 10)

63-22503

- I. Ziegler, K.
- II. K-H-3456-1
- III. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

125241.

Office of Technical Services

Ziegler, Karl.
METHOD FOR OBTAINING ORGANIC COMPOUNDS OF
ALUMINUM AND BERYLLIUM. [1963] 24p.
Order from OTS or SLA \$2.60 63-16813

Trans. of Belgian patent 512, 267, appl. 20 June 52,
issued 15 July 52.

DESCRIPTORS: *Organic compounds, *Aluminum com-
pounds, *Beryllium compounds, *Hydrocarbons,
*Ethylenes, Chemical reactions.

The invention concerns new methods for obtaining
organic compounds of aluminum and beryllium. It rests
on the observation that the compounds of the general
formula $Me(R)_n$, in which Me represents one of the two
indicated metals, R represents hydrogen or a saturated
monovalent radical, aliphatic or aromatic, in any
combination whatever, and n has the value of the valence
of the metal Me, can combine with olefins. The com-
(Chemistry--Organic, TT, v. 10, no. 9) (over)

63-16813

I. Ziegler, K.
II. Patent (Belgium) 512 267

Office of Technical Services

Ziegler, Karl and Koeter, Roland.
PROCESS FOR THE PREPARATION OF ORGANO-
ALUMINUM COMPOUNDS ESPECIALLY THE TRI-
ALKYLS TOGETHER WITH CRYOLITE. [1963] 11p.
Order from OTS or SLA \$1.60 63-16814

Trans. of German patent application Z2838, 22 July 52.

DESCRIPTORS: *Aluminum compounds, Organic com-
pounds, *Cryolite, Alkyl radicals.

The invention concerns a process for the preparation of
organo-aluminum compounds, especially aluminum tri-
alkyla, together with cryolite, characterized in that
alkyl or aryl aluminum halides, especially alkyl alumi-
num sesquihalides are reacted with alkali fluorides at
elevated temperature, advantageously in exact stoichio-
metric proportions, and under nitrogen. (Author)

(Chemistry--Organic, TT, v. 10, no. 9)

63-16814

I. Ziegler, K.
II. Koeter, R.
III. Patent application
(Germany) Z. 2 838

63-16814

Office of Technical Services

Ziegler, Karl, Cellert, Hans-Georg, and Nagel,
~~Konrad~~
PROCESS FOR THE PREPARATION OF ALKYL-
ALUMINUM HYDRIDES. [1963] 10p.
Order from OTS or SLA \$1.10 63-16817

Trans. of German patent 918,928, pub. 7 Oct 54.

DESCRIPTORS: *Aluminum compounds, *Alkyl radi-
cals, *Hydrides, Halides, Metalorganic compounds,
*Ziegler catalysts.

The invention includes a process for the preparation of
alkyl aluminum hydrides of the general formula $AlHXY$,
wherein X is alkyl, R and Y are alkyl or hydrogen, and
their complex compounds with alkali hydrides, char-
acterized by the fact that one reacts alkyl aluminum
dihalides or dialkyl aluminum monohalides with alkali
hydrides. (Author)
(Chemistry--Organic, IT, p. 10, no. 9)

63-16817

- I. Ziegler, K.
- II. Cellert, H.-G.
- III. Nagel, K.
- IV. Patent (Germany) 918 928

Office of Technical Services

Ziegler, Karl.
PROCESS FOR THE POLYMERIZATION OF OLEFINS
AND SOLID OLEFIN POLYMERS. [1963] 2850 words.
Order from CTS(Chem) \$11.40 CTS(Chem)-330
subsequent copies \$1.90/ea.

Trans. of Italian patent 537,164, filed 30 June 55,
granted 19 Dec 55, by Montecatini Società Generale per
l'Industria Mineraria e Chimica.

DESCRIPTORS: *Polyethylene plastics, Synthesis,
Ethylene, Propene, Butene, Polymerization, Metal-
organic compounds, Complex compounds, *Ziegler
catalysts.

(Materials--Plastics, TT, v. 10, no. 2)

63-17431

- I. Ziegler, K.
- II. Patent (Italy) 537 164
- III. CTS(Chem)-330
- IV. Chemical Translating
Service, Palo Alto, Calif.

Office of Technical Services

Ziegler, Karl, Froitzheim-Kuhlhorn, Helga, and
Hafner, Klaus.

METAL COMPOUNDS OF CYCLOPENTADIENE.

Pt. 21 of Metallo-Organic Compounds. [1961] 12p.
18 refs.

Order from SLA \$1.60

61-20291

Trans. of Chem[ische] Ber[ichte] (West Germany)
1956, v. 89, p. 434ff.

DESCRIPTORS: *Metalorganic compounds, Organic
compounds, *Cyclopentadiene, Pentadiene, Sodium
compounds, Calcium compounds, Carboxylic acids,
Acids, Synthesis.

Various methods for the preparation of cyclopenta-
dienylsodium are described. With sodium metal,
cyclopentadiene reacts as an acid with evolution of
hydrogen. With sodium in liquid ammonia, no hydro-
gen is given off; however, 1/3 of the cyclopentadiene
(Chemistry--Organic, TT, v. 7, no. 1) (over)

61-20291

- I. Ziegler, K.
- II. Froitzheim-Kuhlhorn, H.
- III. Hafner, K.
- IV. Title: Metallo-Organic...

184252

Office of Technical Services

Ziegler, Karl.

PROCESS FOR POLYMERIZATION ETHYLENE

[Procédé pour la Polymérisation de l'Éthylène]. Jan 64
[26p]

Order from RIS \$36.00

RIS-96372

Polyolefins Set \$750.00

Trans. of Belgian patent 527 736, Mar 54. (Abstract
available)

DESCRIPTORS: *Polyethylene plastics, *Butenes,
*Ethylenes, Polymerization, Metalorganic compounds,
*Ziegler catalysts, *Aluminum compounds, Alkyl
radicals, *Nickel catalysts, *Cobalt catalysts,
*Platinum catalysts,

Finely divided nickel, cobalt or platinum activators are
used in varying proportions or varying degrees of
activity to control in large measure as desired, the poly-
merization of ethylene in the presence of trialkyl-
(Materials--Plastics, TT, v. 11, no. 11) (over)

TT-64-12317

- I. Ziegler, K.
- II. Patent (Belgium) 527 736
- III. RIS-96372
- IV. Research Information
Service, New York

280815

Office of Technical Services

Ziegler, Karl.

LOW-PRESSURE PROCESSES FOR PRODUCTION OF
HIGH-MOLECULAR WEIGHT POLYETHYLENES AND
CATALYSTS FOR THIS PROCESS [Procédé de Prépara-
tion de Polyéthylènes à Poids Moléculaires Elevés
Utilisables comme Produits Artificiels, et Catalyseurs
pour sa Réalisation]. Jan 64 [21p]

Order from RIS \$29.00

RIS-96370

Polyolefins Set \$750.00

Trans. of Belgian patent 534 792, Jan 55. (Abstract
available)

DESCRIPTORS: *Polyethylene plastics, *Fibers
(Synthetic), Alkenes, Polymerization, Metalorganic
compounds, *Ziegler catalysts, *Aluminum compounds,
Alkyl radicals.

Polyethylenes ranging in molecular weight from 2000 to
50,000 or even 3,000,000, which can be processed into
(Materials--Plastics, TT, v. 11, no. 11) (over)

TT-64-12486

- I. Ziegler, K.
- II. Patent (Belgium) 534 792
- III. RIS-96370
- IV. Research Information
Service, New York

80816

Office of Technical Services

Ziegler, Karl.
PROCESS FOR PRODUCTION OF TRIALKYLALUMI-
NUMS AND ALKYLALUMINUM HYDRIDES (Procédé
pour la Préparation d'Aluminium Trisécyles et
Dehydrures d'Aluminium Alcoyles). Jan 64 [31p]
Order from RIS \$34.00 RIS-96373
Metal Organics Set \$200.00

Trans. of Belgian patent 535 235, Jan 55. (Abstract
available)

DESCRIPTORS: *Metalorganic compounds, *Ziegler
catalysts, *Aluminum compounds, Alkyl radicals,
*Hydrides, Synthesis (Chemistry).

Trialkylaluminums and alkylaluminum hydrides are pro-
duced directly by reacting activated aluminum with
olefins and hydrogen under pressure. The aluminum is
activated by mechanical division and measures prevent-
ing formation of an inactive oxide surface layer. (RIS
abstract)

TT-64-12473

I. Ziegler, K.
II. Patent (Belgium) 535 235
III. RIS-96373
IV. Research Information
Service, New York

260817

(Chemistry--Organic,
TT, v. 11, no. 11)
Office of Technical Services

New Reactions of Unsaturated Hydrocarbons,
by Karl Ziegler, 5 pp.

GERMAN, per, Gluckauf, Vol LXXXVIII,
No 15/16, 1952, pp 380-382.

SLA 60-16798

Sci
Vol IV, No 7
Apr 62

192,656

Ziegler, Karl
LOW-PRESSURE PROCESS FOR POLYMERIZATION
OF PROPYLENE AND APPLICATIONS OF THE "END-
TO-END" POLYMERS SO OBTAINED. Jan 64.
Order from RIS \$85.00 RIS-96480
Polyolefine Set \$750.00

Trans. of Belgian patent 538 782, by Montecatini,
Jun 55. (Abstract available)

DESCRIPTORS: *Polyethylene plastics, *Fibers
(Synthetic), *Propene, Polymerization, Metalorganic
compounds, *Ziegler catalysts,

Linear, predominantly unbranched polymers charac-
terized by end-to-end chain linkage (coiled chains) and
average weights above 10,000 are obtained by poly-
merizing α -olefins or mixtures thereof with catalysts
prepared by reacting compounds of metals of groups
(Materials--Plastics, TT, v. 11, no. 11) (over)

TT-64 12488

- I. Ziegler, K.
- II. Patent (Belgium) 538 782
- III. RIS-96480
- IV. Research Information
Service, New York

80818

Office of Technical Services

Ziegler, Karl.
PROCESS FOR PRODUCTION OF HIGH-MOLECULAR
WEIGHT POLYETHYLENES USABLE AS PLASTICS,
PRODUCTS OBTAINED BY THIS PROCESS AND
CATALYSTS FOR USE IN THIS PROCESS. Jan 64.
Order from RIS \$42.50 RIS-96387
Polyolefins Set \$750.00

Trans. of Belgian patent 542 658, Nov 55. (Abstract
available)

DESCRIPTORS: *Polyethylene plastics, Ethylenes,
Polymerization, Metalorganic compounds, *Ziegler
catalysts, *Aluminum compounds, Alkyl radicals,

Polyethylenes with a degree of crystallinity equal to or
least 80% are obtained by a process using a new
catalyst system that combines previously known
aluminum-organic compounds with iron compounds such
as iron chlorides. (RIS abstract)
(Materials--Plastics, TT, v. 11, no. 11)

TT-64-12493

I. Ziegler, K.
II. Patent (Belgium) 542 658
III. RIS-96387
IV. Research Information
Service, New York

1260810

Office of Technical Services

Ziegler, Karl.
PROCESS FOR SELECTIVE POLYMERIZATION OF
 α -OLEFINS INTO CRYSTALLINE OR AMORPHOUS
POLYMERS. Jan 64.
Order from RIS \$80.00
Polyolefins Set \$750.00

RIS-96568

Trans. of Belgian patent 543 259, by Montecatini,
Nov 53. (Abstract available)

DESCRIPTORS: *Polyethylene plastics, *Alkenes,
Polymerization, Metalorganic compounds, *Ziegler
catalysts, *Aluminum compounds, Alkyl radicals,

The polymerization of α -olefins with the aid of catalysts
prepared by reaction of compounds of IVB-VIB metals
with aluminum-organic compounds can be directed to-
ward the exclusive or preponderant formation of either
isotactic or non-isotactic polymers by the appropriate
variation of chemical or physical characteristics of the
catalysts system. (RIS abstract)

TT-64-12494

I. Ziegler, K.
II. Patent (Belgium) 543 259
III. RIS-96568
IV. Research Information
Service, New York

1260820

(Materials--Plastics,
TT, v. 11, no. 11)
Office of Technical Services

Ziegler, Karl.
PROCESS FOR PRODUCTION OF HIGH-MOLECULAR
WEIGHT POLYETHYLENE AND NEW POLYMERIZA-
TION CATALYSTS [Procédé pour la Préparation de
Polyéthylènes de Poids Moléculaires Elevés Utilisables
comme Produits Synthétiques et Catalyseurs pour la
Mise en Oeuvre de ce Procédé]. Jan 64 [12p]
Order from RIS \$20.00 RIS-96371
Polyolefina Set \$750.00

Trans. of Belgian patent 543 888, Jan 55. (Abstract
available)

DESCRIPTORS: *Polyethylene plastics, *Ethylenes,
Polymerization, Metalorganic compounds, *Ziegler
catalysts, *Magnesium compounds, *Zinc compounds,
Alkyl radicals,

Gaseous ethylene is polymerized rapidly at low pres-
sures into plastics products with molecular weights
(Materials--Plastics, TT, v. 11, no. 11) (over)

TT-64-12487

- I. Ziegler, K.
- II. Patent (Belgium) 543 888
- III. RIS-96371
- IV. Research Information
Service, New York

1260821

Office of Technical Services

Ziegler, K.
PROCESS FOR PRODUCTION OF HIGH-MOLECULAR
WEIGHT POLYETHYLENES USABLE AS PLASTICS
AND CATALYSTS FOR THIS PROCESS. Jan 64.
Order from RIS \$22.00 RIS-96866
Polyolefins Set \$750.00

Trans. of Belgian patent 543 913, Jan 55, supplement
to pat. 534 888, Dec 55. (Abstract available)

DESCRIPTORS: *Polyethylene plastics, *Ethylenes,
Polymerization, Metalorganic compounds, *Ziegler
catalysts, *Aluminum compounds, *Magnesium com-
pounds, *Zinc compounds, Alkyl radicals, *Uranium
compounds, *Thorium compounds, Complex compounds.

Ethylene is polymerized into linear, crystalline poly-
ethylene of high-molecular weight and true plastics
character with combination catalysts which contain, in
lieu of or in addition to organic compounds of aluminum,
(Materials--Plastics, TT, v. 11, no. 11) (over)

TT-64-12524

- I. Ziegler, K.
- II. Patent (Belgium) 543 913
- III. Patent (Belgium) 534 888,
suppl.
- IV. RIS-96866
- V. Research Information
Service, New York

1280822

Office of Technical Services